IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent Application of: LEE, Soon Jo	Customer No.: 30827
Application No.: 10/528,830	Confirmation No.: 3733
Filed: March 23, 2005	Art Unit: 1711
For: DRUM FOR WASHER AND DRYER	Examiner: Heckert, Jason Mark

MS **Appeal Briefs - Patents**
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

APPELLANTS' REPLY BRIEF

Sir:

In response to the Examiner's Answer mailed on July 6, 2010, Appellants hereby submit this Reply Brief.

TABLE OF CONTENTS

This brief contains items under the following headings as required by 37 C.F.R. § 41.41:

I. TABLE OF AUTHORITIES

Cases

Statutes and Other Authorities

II. STATEMENT OF ADDITIONAL FACTS

None.

III. STATUS OF CLAIMS

Current Status of Claims:

Claims canceled: 6-7, 9, 11-24, 27-28

Claims withdrawn from consideration but not canceled: None

Claims pending: 1-5, 8, 10, 25 and 26

Claims allowable: None

Claims rejected: 1-5, 8, 10, 25 and 26

Claims on appeal: 1-5, 8, 10, 25 and 26

IV. GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL

1. Whether claims 1-5, 8, 10 and 25-26 are unpatentable under 35 U.S.C. § 103(a) over U.S. Patent No. 6,062,049 to Martinsson (hereinafter "*Martinsson*") or U.S. Patent No. 4,854,054 to Johnson (hereinafter "*Johnson*") in view of U.S. Patent No. 3,685,338 to Hoffman (hereinafter "*Hoffman*") and further in view of U.S. Patent No. 4,687,614 to Suzuki *et al.* (hereinafter "*Suzuki*") as evidenced by Collins English Dictionary?

2. Whether claims 1-5, and 26 are unpatentable under 35 U.S.C. § 103(a) over PCT Publication No. WO 03/008696 to Yoon (hereinafter "*Yoon*") in view of *Martinsson* or *Hoffman* and further in view of *Suzuki*?

V. ARGUMENTS

A. The Examiner's rejection of claims 1-5, 8, 10 and 25-26 under 35 U.S.C. § 103(a) as being unpatentable over Martinsson or Johnson in view of Hoffman and further in view of Suzuki is improper and should be reversed because Suzuki is nonanalogous art.

To rely on a reference under 35 U.S.C. 103(a) it must be analogous prior art. *See* MPEP § 2141.01(a). Prior art may qualify as analogous art under two criteria: 1) the reference is from the same field of endeavor or 2) if the reference is not within the same field of the inventor's endeavor, the reference is still reasonably pertinent to the particular problem with which the inventor is involved. *See Wyers v. Master Lock Co.,* No 2009-1412, ___ F.3d____, 2010 WL 2901839 (Fed. Cir. July 22, 2010) at p. 11. Furthermore, a reference in a field different from that of the inventor's endeavor may be reasonably pertinent if it is one which, because of the matter with which it deals, logically would have commended itself to an inventor's attention in considering his or her invention as a whole. *See* MPEP § 2141.01(a). For example, in *Wyers,* prior art padlocks were found to be within the same field of endeavor, locksmithing, when the patent at issue itself referred to the prior art padlock in the background of the invention section of the patent , broadly defined its scope, and made it clear that the claims were direct to locking devices. *Slip. op.* at 12. *See* also, *In re Bigio*, 381 F.3d 1320, 1325-1325 (Fed. Cir. 2004)(finding a prior art toothbrush to be analogous to a hair bush when the field of endeavor was found to encompass any brush that may be used for any bodily hair, including facial hair and a toothbrush could be used to brush facial hair). Moreover, even if the prior art padlocks were not within the same field of endeavor, they were clearly reasonably pertinent because the padlocks were directed to the same problem, preventing the ingress of contaminants into a locking mechanism, as the patent at issue. *Wyers,* slip. op. at 12.

Although, a broad spectrum of prior art must be explored and it is reasonable to permit inquiry into other areas where one of ordinary skill in the art would be aware that similar

problems exist, the Examiner has gone beyond such an inquiry in this case. *See* MPEP§ 2141.01(a)(V). Contrary to *Wyers* and *In re Bigio,* in this case, *Suzuki* is nonanalogous art because it is not in the same field of endeavor. *Suzuki* is in the general field of waste disposal, whereas the claimed invention is generally directed to washers and dryers. Specifically, the claimed invention is directed to drums for a dryer or washer, whereas *Suzuki* is directed to a container for storing and disposing of radioactive waste or industrial waste. *Suzuki*, col. 2, lns. 64-68. Unlike hairbrushes and toothbrushes or locking devices and padlocks, which are generally related, drums for a dryer or washer are wholly unrelated to storage containers suitable for radioactive waste or industrial wastes. As such, one of ordinary skill in the art of drums for dryers would not look to the waste storage container of *Suzuki.* Therefore, *Suzuki* is clearly not in the same field of endeavor as the claimed invention.

Furthermore, *Suzuki* is not reasonably pertinent to the particular problem with which the claimed invention addresses because the matter with which *Suzuki* deals would not logically have commended itself to an inventor's attention in the art of dryers and washers. Specifically, *Suzuki* deals the particular problem of creating a high integrity container that is suitable for storing radioactive waste or industrial waste. *Suzuki*, col. 2, lns. 64-68. Moreover, to address this problem, *Suzuki* is directed to a process for forming a three-layer structure comprising a metallic vessel as an outer layer, a concrete lining as an inner layer, and a polymerized and cured impregnant layer as an intermediate layer. *Suzuki*, col. 3, lns. 1-10. Meanwhile, an objective technical problem to be solved in the claimed invention is how to decrease or prevent the vibration and the noise during the rotation of the drum by forming an entirely uniform circular shape of the drum, i.e. by improving the uniformity of the shape. Why would the problem of creating a container with high integrity for long-term safe storage of radioactive waste commend attention by an inventor trying to solve the problem of reducing or prevent vibration and noise of

a dryer drum during rotation? It would not. Therefore, *Suzuki* is not reasonably pertinent to the particular problem with which the claimed invention is involved.

For these reasons, *Suzuki* is clearly not analogous art and the Examiner improperly relied on *Suzuki* to support the rejection of claims 1-5, 8, 10 and 25-26 under 35 U.S.C. § 103(a) as being unpatentable over *Martinsson* or *Johnson* in view of *Hoffman* and further in view of *Suzuki*.

B. **The Examiner's rejection of claims 1-5, 8, 10 and 25-26 under 35 U.S.C. § 103(a) as being unpatentable over *Martinsson* or *Johnson* in view of *Hoffman* and further in view of *Suzuki* is improper and should be reversed because all the claim limitations are not taught or suggested by the prior art.**

Claims 1-5, 8, 10 and 25-26 are patentable over the cited references because all the claim limitations are not taught or suggested. To establish *prima facie* obviousness of a claimed invention, all the claim limitations must be taught or suggested by the prior art. MPEP §2143; *In re Royka*, 490 F.2d 981, 180 USPQ 580 (CCPA 1974). Furthermore, if an independent claim is nonobvious under 35 U.S.C. § 103(a), then any claim depending therefrom is nonobvious. *In re Fine*, 837 F.2d 107, 5 USPQ2d 1596 (Fed. Cir. 1988). As discussed above, *Suzuki* is nonanalogous art and cannot be used to support a rejection of the claimed invention under 35 U.S.C. §103(a). Additionally, none of the other cited references, alone or in combination, disclose or suggest "a cylindrical metal body having a first diameter and a seam without an overlapping portion by butt welding," as claimed in independent claim 1 or "butt welding a seam without an overlapping portion," as claimed in independent claim 26. *Martinsson,* as discussed by the Examiner, describes welding and joint pressing but not in reference to creating a seam in a cylindrical metal body or a rolled metal sheet without an overlap by butt welding. *Martinsson,* col. 1, lns. 19-21 and 49-53. Further, *Martinsson* provides no additional information regarding either the welding process or the joint pressing. Similarly, *Hoffman,* directed to hems (*Hoffman*, Abstract), also fails to provide any such disclosure. The Examiner even acknowledges the lack

of disclosure in *Martinsson* and *Hoffman* and stated they "are silent as to the methods of drum construction." *Examiner's Answer* at p.7. Additionally *Johnson* does not cure the deficiencies of *Martinsson* and *Hoffman*. *Johnson* is directed to a dryer including a front bulkhead assembly providing a pair of airflow outlets from the drying chamber. *Johnson*, Abstract. While *Johnson* describes assembly of some of the components, nowhere does *Johnson* disclose a seam in a cylindrical metal body or rolled metal sheet without an overlap by butt welding. Therefore, none of *Martinsson*, *Johnson* or *Hoffman* teach or suggest, "a seam without an overlapping portion by butt welding," as required by independent claims 1 and 26.

For at least these reasons, the Examiner has not established *prima facie* obviousness and the rejection of claims 1-5, 8, 10 and 25-26 under 35 U.S.C. §103(a) over *Martinsson* or *Johnson* in view of *Hoffman* and further in view of *Suzuki* is improper and should be reversed.

C. **The Examiner's rejection of claims 1-5 and 26 under 35 U.S.C. § 103(a) as being unpatentable over *Yoon* in view of *Martinsson* or *Hoffman* and further of *Suzuki* is improper and should be reversed because all the claim limitations are not taught or suggest by the prior art.**

Claims 1-5 and 26 are patentable over the cited references because all the claim limitations are not taught or suggested. As discussed above, *Suzuki* is nonanalogous art and cannot be used to support a rejection of the claimed invention under 35 U.S.C. §103(a). As acknowledged by the Examiner, Martinsson, *Hoffman* and *Yoon* "are silent as to the methods of drum construction." *Examiner's Answer* at p. 7. Specifically, none of the other cited references, alone or in combination, disclose or suggest "a cylindrical metal body having a first diameter and a seam without an overlapping portion by butt welding," as claimed in independent claim 1 or "butt welding a seam without an overlapping portion," as claimed in independent claim 26. As discussed above, *Martinsson* or *Hoffman* do not disclose or suggest at least the above features. Further, *Yoon* does not cure the deficiencies of *Martinsson* and *Hoffman*. *Yoon* is directed to a drum device for a home appliance for minimizing noise. *Yoon* at p. 1, lns. 6-10. However,

nowhere does *Yoon* disclose or suggest "a seam without an overlapping portion by butt welding," as claimed. Therefore, the Examiner has not established *prima facie* obviousness and the rejection of claims 1-5 and 26 under 35 U.S.C. §103(a) over *Yoon* in view of *Martinsson* or *Hoffman* further in view of *Suzuki* is improper and should be reversed.

D. Conclusion

For reasons as discussed above, the Examiner improperly rejected claims 1-5, 8, 10 and 25-26 under 35 U.S.C. § 103(a) as being unpatentable over *Martinsson* or *Johnson* in view of *Hoffman* and further in view of *Suzuki* as evidenced by Collins English Dictionary and claims 1-5 and 26 under 35 U.S.C. § 103(a) as being unpaentable over *Yoon* in view of *Martinsson* or *Hoffman* and further of *Suzuki* as evidenced by Collins English.

The Honorable Board is requested to reverse the rejections set forth in the Examiner's Answer dated July 6, 20010 and direct the Examiner to pass this application to issue.

If these papers are not considered timely filed by the Patent and Trademark Office, then a petition is hereby made under 37 C.F.R. § 1.136, and any additional fees required under 37 C.F.R. § 1.136 for any necessary extension of time, or any other fees required to complete the filing of this response, may be charged to Deposit Account No. 50-0911. Please credit any overpayment to deposit Account No. 50-0911.

Dated: September 3, 2010

Respectfully submitted,

By: /Alyssa K. Sandrowitz/

Alyssa K. Sandrowitz
Registration No.: 65,401
McKENNA LONG & ALDRIDGE LLP
1900 K Street, N.W.
Washington, DC 20006
(202) 496-7500
Attorneys for Applicants